

APR 24 2007

Federal Communications Commission
Office of the Secretary

April 23, 2007

Marlene H. Dortch, Commission Secretary
Federal Communications Commission, Office of the Secretary
445 12th Street, SW
Washington DC 20054

Re: FCC Notice of Proposed Rulemaking In the Matter of Effects of Communications Towers on Migratory Birds, WT Docket No. 03-187; FCC 06-164

Dear Federal Communications Commission:

These comments are submitted on behalf of American Bird Conservancy, Center for Sustainable Economy (Formerly Forest Conservation Council), National Audubon, The Humane Society of the United States, and Friends of the Earth in response to the FCC Notice of Proposed Rulemaking In the Matter of Effects of Communications Towers on Migratory Birds, WT Docket No. 03-187, FCC 06-164, as published in the Federal Register of November 22, 2006, Volume 71, Number 225, at pages 67510-67518. The Notice of Proposed Rulemaking (NPRM) seeks comment on whether the Commission should take measures to reduce the number of instances in which migratory birds collide with communications towers.

There are more than 170,000 communication towers, also known as antenna structures, around the U.S. and at least 86,000 of these exceed 200' in height and are lit. See data in *Fryer's Site Guide*, now *TowerSource* (2002 data attached). Collectively, these towers present a significant threat to birds, particularly night migrating neotropical birds.

I. PRIOR COMMENTS AND DELAYS IN FCC ACTION.

The undersigned groups and other conservation and scientific groups have submitted detailed comments to the FCC on these same matters on many occasions over the last eight years. We submitted formal detailed comments to the FCC on November 11, 2003 commenting on the FCC Notice of Inquiry (NOI) on Migratory Bird Collisions with Communication Towers and Birds in WT Dkt. No. 03-187. The FCC Chairman had announced plans to conduct this NOI in May 2003 during the pendency of one of our court suits against the FCC for inaction on our Gulf Coast petition. The FCC then took until August 2003 to formally propose its NOI—and has yet to conclude the NOI.

On February 14, 2005 we again submitted formal detailed comments on the Avatar Environmental, LLC Report which the FCC had authorized to summarize the comments on the NOI Regarding Migratory Bird Collisions with Communications Towers, WT Dkt. No. 03-187. The comments on the NOI had concluded in December 2003 and Avatar was retained in May 2004 to review those comments. Our comments on February 14, 2005 were accompanied by a detailed Report completed by scientists at Land Protection Partners. We then submitted reply comments to the FCC on this Avatar Report matter on March 9, 2005, supplemented with another detailed Report completed by scientists at Land Protection Partners. We request that these comments and reports be incorporated by reference with our comments on the NPRM and we are again providing copies of these documents to the FCC.

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Prior to the issuance of the NOI by the FCC in August 2003 and the submittal of our comments, we had provided FCC Commissioners and their staff and various bureau staffers with extensive information beginning in 1999 indicating that communication towers are a significant and continuing source of mortality to migratory birds and detailing the preventative measures the FCC should take. The U.S. Fish and Wildlife Service has done the same in letters to the FCC Chairman and in meetings and briefings, also going back to 1999. See e.g., Letter from Jamie Rappaport Clark, Director, FWS to William Kennard, Chairman, FCC (Nov. 2, 1999).

On July 22, 1999, ABC met with Thomas Power, then Counsel to former FCC Chairman Kennard and made a full presentation on tower kills of birds and the need for FCC reformation of tower registrations and approvals. We pointed out the necessity of the FCC conforming to and meeting the requirements of the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), and the Migratory Bird treaty Act (MBTA). A letter was sent as a follow-up to the meeting to Chairman Kennard and Mr. Power urging action.

On August 11, 1999, ABC was a co-sponsor of an Avian Mortality at Communications Towers Workshop at Cornell University in Ithaca, NY. FCC representatives were present and Holly Berland, an attorney with the FCC, made a presentation. This public workshop was specifically intended to focus on the problem, the research, and the solutions. A U.S. FWS representative made a public presentation with Holly Berland present on why the FCC is NOT categorically excluded from NEPA on bird kills at towers.

On August 24, 1999, ABC, National Audubon Society, Defenders of Wildlife, and the Ornithological Council, together with the U.S. FWS met with a large group of FCC officials at FCC headquarters arranged by Rebecca Dorch (FCC) at ABC's request and attended by Holly Berland and at least eight other FCC officials. Specific requests were made for FCC reforms to resolve the problem of avian mortality at communication towers.

We will not further detail the numerous and extensive contacts and presentations we have made to the FCC over the last eight years, both before and after the Notice of Inquiry on Towers and Birds was issued, but we have a chronological summary of our efforts with the FCC to document the extent, causes, and solutions to bird kills at communication towers and to gain actions to prevent this mortality that we will provide upon request.

We also have filed notices of objections to the registration of individual towers with the FCC beginning on September 2, 1999 when ABC and Hawk Mountain Sanctuary file a detailed petition against the construction of a new cell antenna tower near Hawk Mountain, Kempton, PA. We requested a programmatic EIS and full compliance with NEPA, MBTA, and ESA. The Petition raised the need for reform of the FCC tower registration and NEPA review process. The FCC ordered a stop to the tower construction pending FCC review of the Petition. The FCC failed to respond to the petition until January 2002, when ABC received a call from FCC staff asking the status of the tower and requesting the applicant tower company's phone number. The FCC then dismissed the Petition as the tower company had withdrawn its plans for construction. In a letter dated November 2, 1999 to the Chairman of the FCC from the Director of the Department of Interior's U.S. Fish and Wildlife Service (FWS), the Director urged the FCC to conduct a NEPA programmatic EIS on the tower registration program to examine the extent of

avian mortality, the causes, and the solutions. The Director advised the FCC in this 1999 letter that the annual killing of migratory birds at communication towers was substantial and she pointed out the deficiencies in current FCC regulations that we have noted repeatedly before. She further noted that “The cumulative impacts of the proliferation of communication towers on migratory birds, added to the combined cumulative impacts of all other mortality factors, could significantly affect populations of many species.” Letter from Jamie Rappaport Clark, Director, FWS to William Kennard, Chairman, FCC (Nov. 2, 1999).

The U.S. FWS filed comments on this FCC NPRM dated February 2, 2007 that were signed by Acting Deputy Director Kenneth Stansell. The FWS comments state: “Neither the individual impacts of a tower nor the cumulative impacts of all communication towers are included as part of the NEPA review process. The Service first raised this concern in 1999 at a public workshop on avian collisions at towers held at Cornell University (Willis 1999). More recently, we have raised it at all meetings of the Communication Tower Working Group, in a Service briefing for FCC staff, in a Service briefing for the senior legal advisors to the FCC Commissioners, and in the NOI.”

Despite this urging by the governmental agency tasked by law with the conservation of migratory birds, the FCC has persisted in its refusal to comply with NEPA and other statutes and has failed to complete a programmatic EIS.

On September 14, 2000, the U.S. FWS issued its Guidance Document on the Siting, Construction, Operation and Decommissioning of Communications Towers. A copy of that document was provided the FCC in September 2000 and has been repeatedly discussed with the FCC since September 2000. The towers and Birds NOI mentions these Guidelines. In issuing the Guidelines, the U.S. FWS Director repeated concerns that the “The construction of new towers creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. Communication towers are estimated to kill 4-5 million birds per year, which violates the spirit and intent of the Migratory Bird Treaty Act and CAR Part 50 designed to implement the MBTA. Some of the species are also protected under the Endangered Species Act and Bald and Golden Eagle Act.”

The Director noted that “These guidelines were developed by Service personnel from research conducted in several eastern, Midwestern, and southern states, and have been refined through regional review. They are based on the best information available at this time, and are the most prudent and effective measures for avoiding bird strikes at towers. We believe that they will provide significant protection for migratory birds pending completion of the Working Group’s recommendations. As new information becomes available, the guidelines will be updated accordingly.”

On November 20, 2000, the U.S. FWS Director wrote to the FCC Chairman, attaching the Guidelines and urging the Chairman to “...make the interim guidelines available to all applicants requesting Federal communication licenses, in order to distribute the information more widely among the...industries.” The Director noted that the Guidelines represent “the best measures available for avoiding fatal bird collisions” and “While there is a considerable body of research available on bird strikes at towers and the measures which can be taken to avoid them, this

knowledge is not widely known outside the academic community....We believe that widespread use of these guidelines will significantly reduce the loss of migratory birds at towers.” See the attached FWS letter and Guideline::.

The U.S. FWS, scientists, conservationists, and the undersigned have cited these Guidelines repeatedly to the FCC and have urged the FCC to adopt them in their current system of authorizing, licensing, approving, and registering communication towers. Despite the urging by the FCC acknowledged bird experts at the FWS and others experts in bird migration and tower kills, the FCC has refused to adopt the Guidelines or any part of them in its system of authorizing, licensing, approving, and registering communication towers. In fact, the FCC has done nothing to change the existing system to better protect birds. A number of counties and municipalities have adopted the FWS Tower Guidelines. For example, both Brevard and Leon Counties, Florida have adopted ordinances requiring compliance with the FWS Guidelines.

When the FCC continually refused all interventions of scientists, conservationists, and the U.S. FWS to incorporate measures to prevent avian mortality into its tower program, we filed a formal Petition with the FCC on August 26, 2002, requesting actions to prevent avian mortality from towers in the Gulf Coast region. The FCC failed to respond to this Petition, and we next filed suits seeking a response. Finally, after failing to respond to our petition for more than 3 years and 7 months, and just after oral arguments before the U.S. Court of Appeals for the DC Circuit on our suit, on April 11, 2006 the FCC acted to dismiss our Gulf Coast Petition and agreed to publish the NPRM now before us. In May 2006 we appealed the dismissal and this case is pending before the U.S. Court of Appeals for the DC Circuit.

On April 9, 2004, we filed an Endangered Species Act 60-day letter notifying the FCC of our intent to sue over tower registrations in Hawaii affecting ESA-listed birds. When the FCC failed to comply with the ESA violations, we filed suit on July 26, 2005 in Federal District Court in Hawaii. The FCC defended by alleging that the District Court did not have jurisdiction, despite the ESA’s requirements for citizen suits to be filed in District Court. The Court ruled in favor of the FCC and dismissed the case on jurisdictional grounds on January 4, 2006. We have since filed an appeal and it is pending before the U.S. Court of Appeals for the 9th Circuit after the parties submitted detailed briefs. In the meantime, on March 5, 2007, the U.S. FWS wrote to the FCC recommending that the FCC begin formal consultation with the FWS under Section 7 of the ESA concerning the construction of seven Hawaiian towers included in our suit.

These efforts to have the FCC adopt measures to prevent millions of unnecessary bird deaths each year at communication towers registered by the FCC are detailed here to document that the FCC has refused for more than eight years to act to change any policy or rule regarding its antenna registration program so as to protect migratory birds. This is despite the urging by both the U.S. FWS (the governmental agency tasked by law with the conservation of migratory birds), scientists, and the conservation community, the documentation of avian mortality at towers, the documentation of the causes and solutions, the urging of the U.S. FWS by letter dated November 2, 1999 to the Chairman of the FCC to conduct a NEPA programmatic EIS on the tower registration program and migratory bird impacts and solutions, the issuance in September 2000 by the U.S. FWS of Guidelines to prevent the mortality, the NOI on Towers and Birds issued in August 2003, the Petitions, law suits, and the notice of objections filed to individual towers.

In our comment on the FCC NOI submitted on November 11, 2003, we stated: “The FCC NOI appears to be another FCC delaying tactic designed to prevent the FCC from changing the status quo under which millions of migratory birds are illegally killed at communication towers while the FCC permits the construction of thousands of new towers and the operation and re-registration of tens of thousands of existing towers. There are no time limits for the completion of the NOI and no proposed actions to benefit birds and prevent the annual killing of millions of birds. The NOI could proceed indefinitely, thus providing another convenient excuse to continue the FCC’s years of delays in addressing the killing of millions of migratory birds at towers. The NOI process falls completely short of required NEPA compliance and, indeed, appears to be yet another delaying tactic that prevents the FCC from making necessary changes to protect migratory birds and change the status quo. The FCC should comply with NEPA by issuing a programmatic environmental impact statement concerning the impact of communication towers registered by the FCC on migratory birds and the causes, and propose solutions, and also by reforming the agency’s categorical exclusion policy so that citizens can participate in the NEPA process.”

We note that the NPRM before us continues the FCC’s long pattern of avoiding compliance with environmental statutes in its tower registration program and regulations and continues the *status quo*. In fact, the NPRM does not even propose to adopt any particular rules, but instead initiates yet another round of public comment, the effect of which is to stall agency action to comply with environmental statutes and to protect migratory birds as required by statute.

The FCC has carried on this pattern of delay and avoidance for far too long, beginning in 1999, continuing with the FCC’s August 2003 Notice of Inquiry, and now with this Notice of Proposed Rulemaking that proposes no new rules. The NOI of August 2003 raised nearly identical issues that the FCC is again requesting comments on in this NPRM. During this nine year period of delay, significant numbers of migratory birds are killed annually by collisions with communication towers and related structure in violation of the MBTA, NEPA, and the ESA.

Indicative of the long stall and interminable delays by the FCC is the FCC attorneys’ written brief of August 4, 2005 in response to our mandamus petition seeking FCC action on our Gulf Coast petition, then pending before the U.S. Court of Appeals for the DC Circuit. In an effort to gain dismissal of our requested action, the FCC attorneys told the court that “The Commission’s staff is now studying those comments studies and reports [under the NOI] with a view toward recommending appropriate action by the agency. Furthermore, the Commission’s staff expects that the agency will be in a position to act by the end of the year on the specific petition that is the subject of the mandamus petition before the Court. In these circumstances, where the agency is in the process of addressing a complex and hotly contested issue, there is no justification for the issuance of a writ of mandamus.”

The pledge succeeded in gaining another reprieve for the FCC from acting as the Court stayed proceedings for 90 days, until February 2006. When by February 2006, the FCC again failed to act on our Gulf Coast petition or the NOI, our attorneys were forced to go back to the Court and oral arguments were set for April 6, 2006. The day before these oral arguments, the FCC attorneys advised the Court that the FCC had docketed our Gulf Coast petition for the following week in April, and the FCC acted to dismiss our Gulf Coast petition on April 11, 2006, and agreed to begin the NPRM process. In the April 11, 2006 Order, the FCC noted that: “The Commission has not yet completed its review of the scientific evidence presented in the Migratory Bird NOI docket and has not yet made any conclusions concerning that evidence.”

Thus, three years and 9 months have passed since the FCC began the NOI towers and birds process and, despite pledges to complete the NOI process, the FCC still has not completed the process or made any determinations under that process.

Instead, the FCC took until November 22, 2006 to publish the current NPRM in the Federal Register. Again, despite the passage of many years of delay and a futile NOI process, the FCC in its NPRM proposes no new rule or rules and no specific changes in the tower registration program. The NPRM instead posits some of the same questions as the NOI posited 3 years and 9 months ago. The NPRM has set no timeline for the adoption of any rule or change in the FCC tower registration process that would resolve the issue at hand—the killing of millions of migratory birds each year at FCC registered communication antenna tower structures.

Given the FCC history of failing, to act to resolve this issue, we must again express grave concerns that since the NPRM has no proposed rules and no time limits for the FCC to act, the FCC NPRM could proceed indefinitely, thus providing another convenient excuse to continue the FCC's years of delays in addressing the killing of millions of migratory birds at towers. We would urge the FCC to act promptly after the reply comment period ends on May 23, 2007, especially in light of the recent definitive studies conducted in Michigan and published by Gehring and Kerlinger and the other research and data provided herein.

In comments filed by individual Commissioners in the FCC April 11, 2006 action on the Gulf Coast petition and the proposal to prepare a NPRM, Commissioner Michael J. Copps stated: "There is simply no question that bird-tower collisions are a serious problem. The U.S. Fish and Wildlife Service tells us that millions of birds, perhaps as many as 50 million, die each year through such accidents. That is a sobering conclusion coming from the federal agency with the greatest scientific expertise when it comes to wildlife conservation and primary responsibility for protecting migratory birds. The situation imposes a grave responsibility on *this* agency, too, because of our important jurisdiction over tower painting and illumination – a responsibility to make sure that our rules and practices do not contribute to a needless toll of bird deaths. The Commission could have faced up to this problem years ago. Put bluntly, for too many years this agency treated a widely-recognized problem with not-so-benign neglect. Now we have learned, I hope, that this is not a problem that will just go away if we ignore it. Instead, we need to face up to the hard questions and resolve them in a timely and effective fashion.

We are not faced here with an all-or-nothing choice. Communications towers are essential to modern American life, we all understand that. Without them, we could not watch television, listen to the radio, make cell phone calls, or enjoy the next generation of wireless broadband services. But even as the Commission fulfills its mission to facilitate all these exciting and important technologies, we must also be mindful of the effects we have on the nation's fragile ecosystem.

The industries we oversee are backbone industries with effects felt far and wide, including on our environment. We need to be proactive on ecological preservation, instead of being perceived, as we are by some, as anti-environment or, at best, as some kind of "reluctant environmentalist" dragged kicking and screaming into the Twenty-first century. This kind of agency involvement is something I have pushed for since I arrived here at the Commission in **2001**. So I am pleased we are moving in that direction. And I believe that through hard work and a willingness to learn from both conservationists and tower operators, we will find ways to continue encouraging communications technologies while at the same time minimizing ecosystem costs, such as the high avian death toll we have been witnessing. I believe our tentative conclusion about lighting systems represents a good first step in that direction, and I **look** forward to working with my colleagues to bring this rulemaking to conclusion in the weeks and months – hopefully not years – ahead. Thanks to my colleagues, and to the Bureau, for their good work in developing this item."

We agree with Commissioner Copps that bird-tower collisions are a serious problem, that the FCC has a responsibility to make sure that its rules and practices do not contribute to a needless toll of bird deaths, that the Commission could have faced up to this problem years ago but for too many years this agency treated a widely-recognized problem with not-so-benign neglect, that the FCC needs to face up to the hard ‘questions and resolve them in a timely and effective fashion, and that FCC action should be taken in the weeks and months, **not years**, ahead. Unfortunately, it has been more than a year since Commissioner Copps wrote these words and no action has been taken by the Commission to change the rules or better protect migratory birds. We again urge the FCC to act quickly and forthrightly to resolve this problem without in any way inhibiting the provision of telecommunication services.

11. ACTIONS REQUESTED OF THE FCC AND FCC AUTHORITY AND DUTY TO ACT.

Under the Communications Act of 1934, the FCC has broad authority to license and regulate communications facilities and the entities that use those facilities. 47 U.S.C. §§ 307(a), 303(e). The regulations differ considerably depending on the precise type of communication license sought. For example, wireless service providers (cellular telephone, paging, etc.) are issued a blanket authorization for a particular geographic region and are authorized to build towers anywhere in that particular area without the FCC regulating or reviewing the particular locations where tower will be built. 47 C.F.R. §§ 24; 26 et seq. By contrast, broadcast operators (television, radio, etc.) are required to obtain licenses for particular frequencies, and must obtain site-specific approval from the FCC for each tower prior to construction or modification. See 47 C.F.R. § 73 et seq.

Under section 303(q) of the Communications Act, the FCC is empowered to “require the painting and/or illumination of radio towers if and when . . . such towers constitute . . . a menace to air navigation.” The FCC requires towers that are over 200’ in height or are located near an airport to be constructed under an FCC license, and to be approved and registered with the FCC under its Antenna Structure Registration program. 47 C.F.R. §§ 17.4, 17.7. In addition, FCC regulations require towers to comply with various requirements relating to lighting, painting and siting relative to airports. 47 C.F.R. § 17.22. As part of the mandatory registration process, the FCC requires that certain towers display warning lights. 47 C.F.R. § 17.21; 17.23. Once a tower has been built, the FCC retains ongoing jurisdiction over the tower and the licensees who own or use the tower. See e.g., 47 C.F.R. §§ 17.4; 17.5.

Based on the Telecommunications Act of 1996 (TCA) and the above cited laws and regulations, based on current environmental statutes including the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), and the Migratory Bird treaty Act (MBTA), and based on the research and data submitted herein and previously submitted, and based on the U.S. FWS Tower Siting Guidelines, we believe the FCC has not only the authority, but the duty to act on the killing of birds at many of the 170,000 existing communication towers in the U.S. and to address migratory bird impacts in new tower approvals and registrations. We therefore recommend the following measures for adoption by the FCC under this NPRM to bring the FCC into compliance with federal environmental laws for existing and proposed new towers, and we urge the FCC to adopt new and amend existing rules, regulations, and procedures that will in no

way adversely impact the provision of communication services in this country. These measures should provide that: :

- 1) An applicant for an antenna structure shall submit a written declaration to demonstrate why there is no viable opportunity for co-location of an antenna and that they cannot practicably keep a tower structure under 200', thus avoiding lighting requirements in order to better protect migratory birds. The declaration shall contain documentation that other structures have been examined in a five-mile radius of the proposed antenna structure and that these could not practicably be used for the new antenna and why they could not be used. The applicant for an antenna structure also shall submit a written declaration to document why a proposed new antenna structure could not be kept to a maximum height of less than 200' AGL to avoid lighting requirements.
- 2) An applicant for an antenna structure shall design all new towers structurally and electrically to accommodate the applicant's antenna(s) and comparable antennas for at least two additional users for a minimum of three users for each tower structure, unless this design would require the addition of lights or guy wires to an otherwise unlighted and/or unguyed tower.
- 3) If a new antenna tower structure must be built, and if the structure cannot practicably be kept under 200', the FCC shall require that medium intensity white strobe lights for nighttime conspicuity is to be considered the preferred system over red obstruction lighting systems to the maximum extent possible without compromising safety. See the April 6, 2004 Memorandum from the FAA Program Director for Air Traffic Airspace Management. These medium intensity white strobe obstruction lights for nighttime conspicuity for pilot safety are designated for use by the FAA as L-865 flashing lights in FAA Advisory Circular (AC) 70/7460-1, Obstruction Marking and Lighting, Chapter 6. The pulse rate should be kept as close to the FAA minimum requirement of 40 flashes per minute as reasonably possible, and the lights shall flash simultaneously.
- 4) In cases where the antenna tower is to be located in urban/populated areas, within three nautical miles of an airport, or where for other reasons of aviation safety or zoning requirements use of L-865 white strobe lights for night time conspicuity is not possible, and the applicant demonstrates such, medium intensity red strobe lights shall be used exclusively. These medium intensity red strobe lights for nighttime conspicuity for pilot safety are designated for use by the FAA as L-864 flashing red strobe lights in FAA Advisory Circular (AC) 7017460-1, Obstruction Marking and Lighting, Chapter 5. The pulse rate should be kept as close to the FAA minimum requirement of 20 pulses per minute as reasonably possible, and the lights shall flash simultaneously.
- 5) The use of steady-burning red obstruction lights, FAA L-810, should be avoided.
- 6) Accessory structures at towers should not have steady burning exterior lighting shining up into the night sky, and such structures should not be lit unless required by the FAA or because of security considerations. **All** such lights should be shielded and kept to a minimal intensity. Security lighting for on-ground facilities and equipment should be down-shielded to keep light within the boundaries of the site.

7) An applicant for an antenna structure shall submit a written declaration to demonstrate why the tower they propose for construction must be constructed to exceed 400' AGL. The declaration shall contain documentation that the tower height chosen is necessary for their provision of cellular, TV, radio, or other telecommunication services, and why a tower of a shorter height would not suffice.

8) Guy wires should not be allowed on any new antenna structure under 200' in height AGL, unless the applicant can demonstrate extraordinary circumstances. For any antenna tower that is to be between 200' and less than 500' AGL, the applicant should not use guy wires unless certification is submitted by a qualified engineer that the structure cannot practicably be built as a monopole or of lattice design. In (considering practicability, the applicant must demonstrate that guy wires are necessary because the tower cannot be built as a monopole or lattice structure because of safety concerns, significantly higher costs, or due to other engineering factors that require the use of guy wires. The use of guy wires would also trigger an EA and review by the regional FWS office.

9) If *a* proposed new tower will use guy wires for support and the tower and guy wires are proposed to be located in a known raptor or waterbird concentration area or in raptor or an area of waterbird daily movement routes, or in major diurnal migratory bird movement routes or stopover sites, or on towers known to cause daytime avian mortality, the tower shall use effective daytime visual markers on the wires to prevent collisions by these diurnally moving species.

10) If at all possible, new towers should be sited within existing "antenna farms" (clusters of towers). If at all possible, towers should not be sited in or near wetlands, other known bird concentration areas (*e.g.*, state or Federal refuges, staging areas, rookeries), in known migratory or daily movement flyways, or in habitat of threatened or endangered species. If at all possible, towers should not be sited in areas with a high incidence of fog, mist, and low ceilings.

11) If significant numbers of breeding, feeding, or roosting birds are known to habitually use the proposed tower construction area, relocation to an alternate site should be recommended. If this is not an option, seasonal restrictions on construction may be required in order to avoid disturbance during periods of high bird activity.

12) If a tower is to be located in any area cited in Numbers 9) through 11) above, the applicant must submit documentation to the FCC as to why the tower cannot be located outside these areas and what measures have been taken in the tower construction such as height, lighting, and use of monopole construction to avoid bird impacts.

13) Towers and appendant facilities should be sited, designed and constructed so as to avoid or minimize habitat loss within and adjacent to the tower footprint. However, a larger tower footprint is preferable to the use of guy wires in construction. Road access and fencing should be minimized to reduce or prevent habitat fragmentation and disturbance, and to reduce above ground obstacles to birds in flight.

14) 47 C.F.R. §1.1307 be amended to require that an applicant must review and evaluate, at least the following:

Is the proposed antenna structure located in a migratory bird corridor, on a ridge, near a wetland, or in or near a wildlife area such as a refuge or park, or in any other area that attracts migratory birds?

Is the proposed antenna structure to be constructed likely to cause any migratory birds, and specifically U.S. FWS Birds of Conservation Concern, to be killed at the structure?

Is the proposed antenna structure to be constructed and operated so as to avoid, or at least minimize, the likelihood of causing fatalities to migratory birds, and specifically U.S. FWS Birds of Conservation Concern?

Is the proposed antenna structure to be constructed with guy wires or with red steady burning pilot warning lights (L-810) for night time conspicuity?

If an applicant responds “yes” to either of the first two questions or question 4, or “no” to the third question, an EA would be triggered and the applicant shall submit the proposal to the regional office of the U.S. FWS for review and comment. The requirements for ~~an~~ EA are triggered if an applicant proposes to use either guy wires or red steady burning pilot warning lights (FAA L-810) for night time conspicuity. The new requirements for the avoidance measures detailed in items 1) through 14) above should be applied to all towers, but in cases where migratory birds may be affected, the FCC should closely review the application and assure full compliance.

We note that the U.S. FWS filed comments on this FCC NPRM dated February 2, 2007 that were signed by Acting Deputy Director Kenneth Stansell. Those comments state: “Determining risk from communication towers to migratory birds and their habitats — and thus the need for future study and a possible EA — is very important. We recommend that the FCC through rulemaking require the development and use of a Tower Site Evaluation Form, similar to the one created by the Service that accompanied the 2000 tower guidance. The Evaluation Form should be developed by the FCC in consultation with the Service, industry, and the conservation community. Once completed, the FCC should require through rulemaking that the industry use, complete, and submit this form to the appropriate Service Field Office for review, allowing the Service to make a “study or no-study” determination and a recommendation for conducting an EA.” We concur.

The U.S. FWS comments further proposes that “If the FCC is willing to establish an environmentally preferred industry standard and require the applicants to complete a Site Evaluation Form to be provided to the Service for review, we recommend a ninth category be added to the FCC’s NEPA procedures at 47 CFR 1.1307(a) which should read as follows: ‘(9) Facilities that due to their proposed location and/or structural makeup (height, support, and lighting) may result in substantial risk of collisions by migratory birds and/or adverse modification of habitats supporting migratory birds. To ascertain whether a proposed action may affect migratory birds, an applicant shall complete a Site Evaluation Form and provide it to the U.S. Fish and Wildlife Service Ecological Services Field Office having jurisdiction for the area in which the facility is proposed to be located. If, after review of the Site Evaluation Form, the Service is of the opinion that the applicant has made all reasonable efforts to minimize the impacts of the proposed facility on migratory birds, including compliance with the Commission’s environmentally preferred industry standards, *the* Service will advise the applicant of that fact. If, however, the Service is of the opinion that the applicant has not made

all reasonable efforts to minimize the impacts of the proposed facility on migratory birds and that an EA should be prepared by the applicant for the facility, the Service will forward the Site Evaluation Form and the Service's recommendation to the Commission for its consideration and will alert the applicant of that action.'

The Service's NJFO has reported that, among others, very tall broadcast towers have often not been submitted for Service review. These have included towers at Corbin City (765 ft AGL), Little Egg Harbor (1,000 ft AGL, at a coastal site), and Bayonne (2,000 ft AGL, a key migratory pathway). In each case, the NJFO learned of these proposals from third-party or media sources rather than project proponents or the FCC. When proposed tower projects are not submitted to a Field Office for review, there is the potential for towers to be built without the project proponent's full understanding of FCC responsibilities under MBTA, BGEPA, and ESA." We concur with these recommendations of the U.S. FWS and would urge their adoption as rules. If these FWS recommendations are not adopted, then at minimum we further recommend that item #15 below be adopted:

15) Each tower applicant should be required to provide documentation verifying a determination that no EA is required, and this should include a U.S. FWS regional office determination of whether any threatened or endangered species or Birds of Conservation Concern are in the area and the potential effects on such species, as well as a review by the regional office of the U.S. FWS of potential migratory bird impacts for each new tower, and whether the tower would be constructed and operated so as to avoid taking migratory birds. In revising the requirements for applicants under 47 C.F.R. §1.1307, the FCC should require that the potential take of any ESA-listed species and Birds of Conservation Concern are avoided by the adoption of the measures in items 1) through 14) above.

16) All existing registered antenna structures that employ red steady burning lights (FAA L-810) for night time conspicuity shall be required to phase in the FAA preferred white strobe lighting (FAA L-865) system to replace red steady burning lights. Existing towers that are both guyed and that use red, steady burning lights should be made priorities for retrofitting with white or red strobe or strobe-like lights. If replacement of the L-810 lights with white strobes (L-865) is not possible for reasons of aviation safety or zoning requirements and the registrant demonstrates such, then the use of L-864 red strobe or fast blinking lights for night time conspicuity shall be employed. This should occur when steady burning red lights (L-810) on existing antenna structures burn out and need to be replaced. **All** such towers shall terminate the use of red steady burning lights for nighttime use within five years of finalization of this rulemaking. If the existing antenna tower structure already employs white (L-865) or red strobe *or* fast blinking lights (L-864) exclusively for nighttime conspicuity, no changes need be made.

17) All owner/operators of communication towers shall be required to scientifically assess avian mortality at each existing tower that is more than 500' AGL during at least one spring and fall migration season if the tower is guyed, and if the tower still employs red steady burning aviation safety lighting for night time conspicuity. If the tower owner/operator agrees to switch the L-810 steady burning red lights to L-865 or L-864 lights, then the monitoring requirement can be waived.

New towers that exceed 300' and that use L-810 steady burning red lights at night and that are located where ESA-listed species or Birds of Conservation Concern species fly by should be required to be scientifically monitored during at least one spring and fall migration season for mortality if the towers are guyed and employ red steady burning red lights (FAA L-810) for night time conspicuity.

Reports of the avian fatalities at these towers from on-the-ground searches during spring and fall should be statistically adjusted for predator removal and searcher efficiency. These reports should be delivered to the FCC by the end of the calendar year in which they were conducted. The reports shall be available to the public.

18) Sufficient public notice shall be given by the FCC under 40 C.F.R. § 1506.6 or by the tower applicant of all new proposed antenna structures coming before the FCC for approval and registration. Notice should be provided so that the public is provided an opportunity to comment on all antenna structure registration applications, whether the Commission believes these decisions are categorically excluded from NEPA review or not. This notification shall conform to CEQ rules for public participation at Section 1507.3(a).

111. LEGAL BASIS FOR ACTION.

A. INTRODUCTION AND GENERAL RESPONSE TO LEGAL INQUIRIES IN THE NPRM.

Following are our responses to the legal inquiries posed in the NPRM that dictate the adoption of the measures outlined in Section II above. The FCC has requested comments on, among other legal issues, the nature and scope of its duty to comply with several conservation statutes, in particular the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), and the Migratory Bird Treaty Act (MBTA).

We must note here that the FCC legal inquiry in this NPRM continues the FCC's long pattern of avoiding compliance with environmental statutes in its tower registration program and regulations. These legal questions have been posited for years and answered for years. Surely, the dozens of attorneys at the FCC and the FCC Office of General Counsel can provide clear answers to these legal inquiries, and these questions should not be used as another excuse for delay. Absent from the NPRM is any proposed rule, and substituted are the same or similar legal questions the FCC has posited in the past with the same or similar questions on towers and migratory birds posited in the August 2003 NOI.

The NPRM raises legal questions that are inappropriate in this setting. Section 403 of the Communications Act governs FCC inquiries such as this NPRM. See. 47 U.S.C. §403. Under that provision, the FCC can request comment on matters that arise under the Communications Act. *Id.* The FCC's use of this NPRM to request comments on purely legal matters that do not arise directly under the Communications Act — such as whether the agency has a duty to comply with NEPA, the ESA, and the MBTA— is improper. As explained below, the FCC does not have discretion to ignore requirements under these statutes, thus the FCC's request for comments regarding its duty to perform such requirements is inappropriate.

Moreover, the FCC has biased the NPRM against conservation interests by posing purely legal questions to the self-interested members of the regulated industry. Clearly, the FCC cannot premise its compliance with conservation laws on public comments, but instead must conduct its own unbiased legal assessment of the applicable conservation statutes and of FCC regulations, and amend the FCC rules as necessary to comply with the law. Nonetheless, we again shall detail clearly why the FCC is obligated to meet the requirements of this nation's basic environmental laws and how the FCC is failing to do concerning its antenna structure review, approval, and registration program.

B. THE FCC TOWER REVIEW, APPROVAL, AND REGISTRATION PROGRAM IS A FEDERAL ACTION AND IS COVERED BY NEPA, ESA AND MBTA.

The NPRM notes at paragraph 19 that some industry commenters argue towers do not trigger federal environmental statutes--"tower siting and construction are primarily private actions." This suggestion is without legal merit. Regardless of whether the actual construction and siting of the tower involve private actors, the FCC's tower review, approval, and registration program is a federal program that must comply with NEPA. See 40 C.F.R. §1508.18(a) (describing the "actions" that are covered by NEPA to include "continuing activities" and "programs"); and 50 C.F.R. §402.02 ("Action [under the ESA] means all activities or programs of any kind authorized, funded, or carried out, in whole or in part, by Federal agencies..... Examples include, but are not limited to..... the granting of licenses....."). The Communications Act, 47 U.S.C. §303(e), provides that the Commission "from time to time, as public convenience, interest, or necessity requires, . . . shall regulate the kind of apparatus to be used with respect to its external effects..". The FCC is authorized to suspend a license if the licensee violates any law that the FCC is authorized to administer. 47 U.S.C. §303(m). Thus, the FCC not only is authorized, but is required to comply with federal environmental statutes in connection with its tower licensing program and regulations.

Contrary to the contentions of the industry that seeks to maintain the status quo, the FCC acknowledges its authority and duties to act under NEPA and the ESA. In paragraph 33 of the NPRM, the FCC notes that: "In adopting its environmental rules, the Commission in accordance with its public interest responsibilities under the Communications Act, previously has determined that construction of communications towers requires compliance with environmental responsibilities under NEPA and the ESA. Moreover, although under our present rules we do not routinely require environmental processing with respect to migratory birds, the Commission has considered the impact of individual proposed actions on migratory birds as part of its overall responsibility under NEPA. In order to fulfill its obligations under NEPA and the ESA, the Commission has promulgated rules to address such issues. We tentatively conclude that the obligation under NEPA to identify and take into account the environmental effects of actions that we undertake or authorize may provide a basis for the Commission to make the requisite public interest determination under the Communications Act to support the promulgation of regulations specifically for the protection of migratory birds, provided that there is probative evidence that communications towers are adversely affecting migratory birds."

Indeed, in previous cases involving tower applications and registrations by the FCC, the Commission acknowledges it has considered the impact of individual proposed actions on migratory birds as part of its overall responsibility under NEPA. See NPRM, paragraph 33, Note 111. *In re Leelanau County*, Michigan, 9 FCC Rcd 6901 (1994), the case arose as a result of a challenge to a communication tower based on migratory bird impacts by the Citizens for Existing Towers, Michigan Audubon Society, National Audubon Society, and the National Parks and Conservation Association. *In re Deersville, OH*, 19 FCC Rcd 18149 (WTBSCPD 2004), was the subject of a Petition to Deny that the Appellants filed on the basis that the proposed facility would have a significant effect on migratory birds. See Memorandum Opinion and Order DA 04-29990 (Sept. 14, 2004).

The Commission's attorneys also have argued that the FCC has authority to regulate towers specifically as they affect birds and that they have exercised its authority over tower construction in the past. In a court brief filed by FCC attorneys in August 2005 concerning the Mandamus Petition of American Bird Conservancy et al. v. FCC in the U.S. Court of Appeals for the District of Columbia Circuit, these attorneys cited the *In re Leelanau County* case noted above to the Court of Appeals, as well as *Caloosa Television Corp.* 3 FCC Rcd 3656, 3658 (1988), recon. denied, 4 FCC Rcd 4762 (1989); *In the Matter of T-Mobile and the Pierce Archery Proposed Antenna Tower*, 18 FCC Rcd 24993, 24997 (2003); *Letter from Linda Blair, Mass Media Bur., FCC, to Tanja L. Kozicky*, 11 FCC Rcd 4163, 4166 (Aud. Serv. Div. 1996); *In re Application of Baltimore County, Maryland*, 4 FCC Rcd 5068, 5071 (1989), review denied, 5 FCC Rcd 5616 (1990). The FCC attorneys cited these cases to demonstrate to the Court that indeed the FCC has exercised its regulatory authority in considering the impact of proposed tower construction projects on migratory birds and the environment, and in certain circumstances, has required modifications to protect birds and the environment.

Why then does the FCC insist in this NPRM on asking for advice on whether it has this previously exercised authority and duty under NEPA, the Communications Act, or other statutes?

We herein again provide clear and substantial evidence documenting that communication towers adversely affect migratory birds and that this clearly meets the NEPA standard for "significance" as delineated in the statute, regulations, and case law governing the Act. We further document below the requirements of the MBTA and how the FCC is bound by these requirements and has both the statutory authority and duty to comply with the MBTA, NEPA, and ESA. The U.S. FWS also has submitted comments on this NPRM citing the federal statutes and case law that require the adoption of the mitigation measures and procedures outlined in their letter and herein, and their statutory basis under the MBTA, NEPA, and ESA.

The FCC must initiate procedures to comply with the nation's key conservation statutes immediately in connection with its antenna structure approval and registration program. New rules should be adopted under this NPRM to fully comply with these statutes.

We suggest that the recommendations in Section II above to protect migratory birds would help cure some of the existing violations of NEPA, ESA, and MBTA by avoiding or at least minimizing bird fatalities. But a programmatic EIS is still required as are the other changes in individual antenna structure review suggested herein. Such rules to prevent bird mortality should have been proposed as part of this NPRM but were not; this can be remedied by adoption of such rules shortly after the reply comment period ends on May 23, 2007.

C. NEPA COMPLIANCE.

1) NEPA REQUIRES A PROGRAMMATIC EIS.

The FCC requests comments on “the threshold necessary to demonstrate an environmental problem that would authorize or require the Commission to take action.” NPRM at paragraph 32. Under NEPA, 42 U.S.C. §§ 4321 et seq, because communication towers “will or may” significantly affect migratory birds, the FCC must conduct a Programmatic EIS immediately. This programmatic EIS would be on the overall impacts to the environment of its antenna approval and registration program, especially on migratory birds. This is necessary to comply with NEPA.

To the extent this NPRM seeks scientific information relating to effects of towers on migratory birds, we refer the agency to our comments in this document and in previous submissions. This data overwhelmingly supports the necessity of NEPA action and compliance. For example, the FCC in this NPRM at paragraph 16 notes that: “FWS claims, however, there has been a recent dramatic increase in migratory bird deaths as a result of the exponential growth in communications tower construction that began in the 1990s. The agency estimates that collisions with communications towers are responsible for at least 4 to 5 million bird deaths per year, and that if a proper cumulative impact study were conducted it might indicate the number to be closer to 50 million per year.”

In the letter of November 2, 1999 mentioned above and below, the Director of the U.S. Fish and Wildlife Service urged the FCC to conduct a NEPA programmatic EIS on the tower registration program, noting that the annual killing of migratory birds at communication towers was substantial and “....could significantly affect populations of many species.” Letter from Jamie Rappaport Clark, Director, FWS to William Kennard, Chairman, FCC (Nov. 2, 1999).

In the FCC NOI at page 14, the FCC notes that it is not expert in migratory birds but the FWS is the lead Federal agency for managing and conserving migratory birds. The FCC further acknowledges that the FWS undertakes a number of bird surveys with the Regional FWS offices. The Director of the FWS, the Federal agency with this expertise in birds cited by the FCC, clearly states that the FCC should prepare a programmatic EIS under NEPA to delineate the impacts on birds and to arrive at mitigation measures because of the “significance” of bird mortality at communication towers.

In the U.S. FWS filing of February 2, 2007 on this NPRM, the FWS states that: “The FCC procedures for NEPA compliance require applicants to consider the potential environmental effects, as well as the effects on historic properties, from construction of antenna facilities or structures if the proposed facility is located in or may affect resources identified within 1 of 8 listed categories. Those effects must be disclosed in an environmental assessment (EA) filed with

the FCC for review. Migratory birds, however, unless federally listed or their habitats are designated 'critical,' are not included in the FCC location review process. Neither the individual impacts of a tower nor the cumulative impacts of all communication towers are included as part of the NEPA review process. The Service first raised this concern in 1999 at a public workshop on avian collisions at towers held at Cornell University (Willis 1999). More recently, we have raised it at all meetings of the Communication Tower Working Group, in a Service briefing for FCC staff, in a Service briefing for the senior legal advisors to the FCC Commissioners, and in the NOI."

This analysis from the federal agency with the statutory duty to conserve migratory birds and with the agency expertise on birds should be enough to trigger full NEPA compliance and a programmatic EIS. However, the FCC has taken the remarkable position that "the telecommunications industry [as a whole] does not generally raise environmental concerns." 51 Fed. Reg. 14999, 14999 (Apr. 22, 1986). This is despite the FCC's annual approval and registration of thousands of communications towers which obviously has "significant" environmental impacts within the meaning of NEPA.

There is no question that communication towers "will or may" cause significant adverse effects to migratory birds within the meaning of NEPA and its implementing regulations. For the last 8 years, American Bird Conservancy, Forest Conservation Council, and other conservation groups, along with scientists from the U.S. Fish and Wildlife Service, including its' Division of Migratory Bird Management, and other scientists, have provided the agency with information, documentation, correspondence, and studies concerning migratory bird mortalities at communication towers. This information establishes not only that migratory birds *are* killed as a result of collisions with FCC-licensed towers and related structures such as guy wires, but also that these mortalities potentially have significant adverse effects on certain migratory bird populations, including Birds of Conservation Concern. See, e.g. ABC et al. comments on the FCC NOI on Birds and Towers dated February 14, 2005, March 9, 2005, and November 11, 2003, including the attached studies and reports from Longcore et al.; see also U.S. Fish and Wildlife Service Division of Migratory Bird Management Comments dated March 9, 2005, February 11, 2005, and November 18, 2003; see also comments and scientific data submitted by Dr. Joelle Gehring on September 19, 2006 and February 14, 2005, and electronic mail correspondence from Gerald Winegrad of ABC to FCC (various dates).

The U.S. FWS Birds of Conservation Concern are migratory birds that the FWS believes are likely to become candidates for listing under the ESA unless conservation measures are taken. These species are either in substantial decline or are otherwise threatened by small or restricted populations, or are dependent on restricted or vulnerable habitats. This list was mandated by Congress to "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation action, are likely to become candidates for listing under the Endangered Species Act of 1973." Fish and Wildlife Conservation Act of 1980, as amended. 16 U.S.C. §2912 (a)(3). Hence, the 2002 list compiled by the FWS consists of migratory birds that the FWS believes are likely to become candidates for listing under the ESA unless conservation measures are taken. These species are either in substantial decline or are otherwise threatened by small or restricted populations, or are dependent on restricted or vulnerable habitats.

For a list of the U.S. FWS Birds of Conservation Concern, see U.S. Fish and Wildlife Service. *Birds of conservation concern 2002*. Division of Migratory Bird Management, Arlington, Virginia. 99 pp. The online version is available at: <http://migraorybirds.fws.gov/reports/bcc2002.pdf>.

We have suggested above in Section II, that in revising 47 C.F.R. 51.1307 requirements for applicants, the FCC should require that the potential take of any Birds of Conservation Concern be listed as an item triggering an Environmental Assessment and avoidance measures to prevent the take of such species.

Insofar as this inquiry also poses a legal question, the FCC cannot premise its determination of significance under NEPA on public opinion. The FCC is required under NEPA to follow the standard for “significance” as delineated in the statute, regulations, and case law governing the Act. The Council on Environmental Quality (CEQ) has promulgated regulations implementing NEPA that are binding on all federal agencies. See 40 C.F.R. 51500.3. These regulations are afforded “substantial deference” by the courts. *Andrus v. Sierra Club*, 442 U.S. 347, 357-58 (1979). The CEQ regulations discuss the meaning of the term “significantly” in detail at 40 C.F.R. §1508.27. Among other things, the regulations state that “[s]ignificance exists if it is reasonable to anticipate a cumulatively significant impact on the environment.” Id. §1508.27(7). Additionally, “[s]ignificance cannot be avoided by terming an action temporary or by breaking it down into small component parts.” Id.

NEPA requires all federal agencies to prepare a detailed environmental impact statement (“EIS”) analyzing the environmental impacts of “every major Federal action significantly affecting the quality of the human environment.” 42 U.S.C. §4332(2)(C). NEPA applies to “all agencies of the Federal Government.” 40 C.F.R. §§ 1508.12. Under regulations for implementing NEPA, covered actions include “continuing activities” and “programs,” 40 C.F.R. § 1508.18(a), and “federal agencies must conduct an EIS for any action that “will or may” have a significant effect.” Id. §1508.3 (emphasis added) (“Affecting means will or may have an effect on”). The FCC’s own regulations governing its implementation of NEPA specify that they “shall apply to all Commission actions that may or will have a significant impact on the quality of the human environment.” 47 C.F.R. § 1,1303 (emphasis added). Accordingly, “[a]n agency’s refusal to prepare an [EIS] is arbitrary and capricious if its action might have a significant environmental impact.” *State of North Carolina v. FAA*, 957 F.2d 1125, 1131 (4th Cir. 1992) (emphasis added).

In determining whether a federal action will or may significantly affect the quality of the human environment, all direct, indirect, and cumulative effects of an action must be assessed. CEQ regulations require agencies to consider three types of actions when preparing an EIS: 1) “connected actions,” which means they are closely related and therefore should be discussed in the same impact statement; 2) “cumulative actions,” which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement; and 3) “similar actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography.” 40 C.F.R. §1508.25(a). Because the FCC’s communication tower review, approval, and registration

program are connected, cumulative, and similar in nature, the ongoing program of tower approval and registration is an agency program for purposes of NEPA analysis, requiring a programmatic environmental impact statement.

The documentation that has been previously submitted by us to the FCC in the NOI proceeding, including the detailed Longcore et al. Land Protection Partners Reports in 2005, and the data provided herein, clearly documents that avian mortality is significant at communication towers and certainly triggers NEPA's "significant" impact on the environment test. Longcore, T., C. Rich, and S.A. Gauthreaux Jr. *Scientific basis to establish policy regarding communications towers to protect migratory birds: response to Avatar Environmental, LLC, report regarding migratory bird collisions with communications towers*, WT Docket No. 03-187, Federal Communications Commission Notice of Inquiry, Los Angeles, Land Protection Partners, 33 pp. (2005). PLEASE NOTE: For reference purposes, each referral to this above cited document is referenced herein as Longcore et al. Land Protection Partners Reports (2005) and includes both the original February 2005 document and the reply document of March 2005 filed with the FCC.

The scientists who prepared the Longcore et al. Land Protection Partners Reports (2005) have subjected conducted further exhaustive literature reviews, examined new research and studies, and run their data through extensive statistical review for publication. This has resulted in their new work that has been filed with the FCC as formal comments on this NPRM. See Longcore, T., C. Rich, and S.A. Gauthreaux Jr. *Biological Significance of Avian Mortality at Communications Towers and Policy Options for Mitigation: Response to Federal Communications Commission Notice of Proposed Rulemaking Regarding Migratory Bird Collisions With Communications Towers*, WT Docket No. 03-187, (April 2007). The authors of this new analysis, joined by other scientists, plan to publish the avian mortality documentation and it may be cited as Longcore, T. C. Rich, S.A. Gauthreaux Jr., B. MacDonald, and L. M. Sullivan. In preparation. *Is mortality of birds at communication towers biologically significant?* PLEASE NOTE: For reference purposes, each referral to this document filed with the FCC as part of this NPRM is referenced herein as Longcore et al. Land Protection Partners Analysis (2007).

In the Longcore et al. Land Protection Partners Analysis (2007), the authors have concluded that ~4.3 million birds are killed at communication towers under the jurisdiction of the FCC annually, and have adjusted avian mortality from their previous Report to concur with the low end estimates made therein. In their new analysis filed with the FCC as part of the NPRM, the scientists/authors found the level of mortality for three of the ten avian species killed most frequently at towers to be: Red-eyed Vireo-386,426; Ovenbird-337,341; and Common Yellowthroat-295,130.

For Bay-breasted Warblers, the estimated annual mortality was 151,122 and for Chestnut-sided Warbler--97,091. Both these latter species are U.S. FWS Birds of Conservation Concern, whose populations are declining, and like at least 63 other Birds of Conservation Concern, are killed at towers. This Congressionally mandated list is published to alert managers that these birds may become candidates for Endangered Species Act listing unless action is taken to aid their recovery.

The Report estimates an annual tower mortality of greater than 0.5% of estimated population sizes for 34 avian species including 20 Birds of Conservation Concern. Red-cockaded Woodpeckers, a federally endangered species, are also documented as killed at towers. Twenty-four species of U.S. FWS Birds of Conservation Concern each have estimates of more than 10,000 fatalities at communication towers annually. See Table 3 in Longcore et al. Land Protection Partners Analysis (2007).

The Longcore et al. Land Protection Partners Analysis (2007) of avian mortality is based on the FCC Antenna Structure Registration Data System that when last checked indicated there were 102,706 antenna structures (communication towers) registered in the FCC data base. Longcore et al., using the FCC data base, further eliminate more than 14,000 towers from their analysis and conclude that there are 87,224 towers in the FCC data base that are in Bird Conservation Regions where bird fatalities at towers were documented or in other geographic areas where such fatalities were likely. As the authors note, their analysis and bird fatality computations are very conservative and are likely to underestimate such fatalities. We concur and note that the LPP overall bird and species-specific data is based on the FCC tower registration database that lists 102,706 total towers, and Longcore et al. assume from this data base that there are 87,224 towers from 0 meters to 620 meters (2,034') AGL that are in areas of the country that have had recorded tower mortality or are in areas that are likely to cause such mortality.

However, many antenna structures are not registered in the FCC Antenna Structure Registration Data System. *Fryer's Site Guide* in 2002 lists 170,087 towers. This means the likely annual death toll for migratory birds is much higher than Longcore et al. estimate. James M. Fryer published *Fryer's Site Guides* beginning in 1991 that were regional print publications detailing the location and number of communication towers in the United States. *Fryer's Site Guides* became the industry's most comprehensive directory of antenna sites. *Fryer's Site Guides* were used by industry to assess the availability of existing structures to locate new antenna. With the rise of the internet, Mr. Fryer's publications were transferred from the print data he maintained and updated, to electronic data, and Mr. Fryer created *TowerSource*, the first on-line searchable site database.

According to the web site for *TowerSource*, this company "was started out of a need to reduce a significant barrier to entry for new service providers or those service providers wishing to expand coverage. One of the main barriers to entry for these service providers is locating and negotiating lease terms for antenna deployments. Additionally, landlords of vertical assets now have a cost effective, industry recognized partner to promote and market their real estate. *TowerSource* is an intuitive process-driven market exchange platform to identify vertical mounting assets in the wireless industry. *TowerSource* is the largest and most accurate vertical asset site exchange in the US. *TowerSource* enables those seeking to secure vertical assets and those with sites for lease." In late 2005, Richard Biby of Biby Publishing acquired *TowerSource*. See: www.towersource.com/ts/site/app/main/content.jsp?guid=3066171C-CDFC-F3E9-59B5-96560F14C856&content=D4D4E200-2A1C-2DD0-8CC5-3CC1D6E7F4A6

In a summary (attached) prepared for the Personal Communications Industry Association and presented to the Communication Towers Working Group meeting of February 22, 2002, the following data on towers from *Fryer's Site Guide* is reported as of 2002 (of course these numbers have increased):

There are at least 170,087 towers in the U.S. as of 2002, and according to Mr. Fryer, the number could be as high as 235,000.

According to the data from the *Fryer's Site Guide* (attached), there are 1,677 towers of 1,000' AGL or higher and 98% are estimated to be guyed; 3,838 towers from 501' to 999' and 87% are estimated to be guyed; 9,892 towers from 401' to 500' and 75% are estimated to be guyed; 70,616 towers from 201' to 400' and 45% are estimated to be guyed; and 84,064 towers 200' and under, and 10% are estimated to be guyed, and 15%-20% estimated to have aviation safety lighting.

The significant disparity between the towers identified in *Fryer's Site Guide* as compared to the numbers in the FCC data base becomes evident from just examining the highest towers in the country, those exceeding 1,000' AGL. *Fryer's Site Guide* identifies 1,677 towers of 1,000' AGL or higher; the FCC data base contains, at most, 851 towers of 1,000' AGL or higher.

Refining this data a bit further, there are a total of 15,407 towers that exceed 400' in height and approximately 12,401 of these towers are guyed. All of these towers are required to have aviation safety lighting for night time conspicuity and many of these towers employ the red steady burning lighting systems (FAA L-810) known to attract large numbers of birds. This combination of red steady burning lights and guy wires presents a lethal death trap for millions of migratory birds each year, and this is detailed in the Longcore et al. analysis filed with the FCC as part of this NPRM, as well as in the many studies, research, and documents cited herein.

The Longcore et al. Land Protection Partners Analysis (2007) parses the towers from the FCC tower registration database to only 87,224 in areas that have or are likely to affect birds. These scientists work from an FCC base of 9,095 towers over 400' AGL, 762 towers in excess of 1,000', 2,123 towers from 500'-999', 6,310 towers from 400' to 499', and another 49,244 towers from 200' to 399'. Refining the FCC data a bit further, there are a total of 9,195 towers that exceed 400' in height the scientists use in their calculations. Using the *Fryer* estimates, approximately 80% of these towers that exceed 400' are guyed, or 7,365 towers.

Therefore, the data produced documenting the killing of migratory birds in the Longcore et al. Land Protection Partners Analysis submitted as part of this NPRM is very conservative as there are many more towers. Collectively, these towers pose a formidable obstacle to birds, particularly to night migrating neotropical birds. The data cited herein and in the Longcore et al. Land Protection Partners Analysis submitted as part of this NPRM conclusively documents that the annual avian fatalities at towers constitutes a "significant effect" on the environment under NEPA standards and is **biologically significant** for a number of these avian species. Avian fatalities at towers goes well beyond NEPA "significant effect" standards and rises to a substantial threat to a number of protected migratory bird species.

We also direct the FCC's attention again to the formal reply comments in the NOI on the Avatar Report submitted for the U.S. FWS by Dr. Albert Manville, essentially endorsing the previous analysis by Land Protection Partners. The FWS reply states: "In our opinion, the LPP comments provide a detailed and scientifically-sound analysis of current avian-communication tower interactions." "The population impacts to migratory songbirds (and other avifauna) and impacts to their population status are frightening and biologically significant."

For these reasons, it is clear that the FCC's antenna structure approval and registration program constitutes a "significant" action under NEPA and triggers the full panoply of NEPA requirements by the FCC.

We also note that the FCC NPRM inquiry into other sources of avian mortality is without merit. The NPRM asks: "Also, what is the relevance, if any, of other causes of avian mortality, such as buildings, transmission lines, and vehicles?" It is the killing of migratory birds at towers under the jurisdiction of the FCC that requires the FCC to act under NEPA, the MBTA, and under the ESA. That birds are also killed by other means is not relevant to this inquiry or to the obligations for the FCC to act under NEPA, MBTA, and the ESA. The scientists/authors of the Land Protection Partners Analysis submitted with our NOI/Avatar comments of February 14, 2005 conclude that "Expressing tower kill mortality as a percentage of total human-induced mortality therefore does not make sense." Most recently in their NPRM filing the scientists/authors conclude "The proportion of total human-caused mortality attributable to towers is therefore inconsequential to the assessment of impacts."

The scientific documentation of the significance of tower kills on migratory bird populations, particularly of U.S. FWS Birds of Management Concern, is more than enough to require action by the FCC to account for and prevent this mortality under NEPA, MBTA, and the ESA.

This NPRM does not relieve the FCC from full compliance with NEPA and its implementing regulations. Section 102(2)(C) of NEPA requires federal agencies to prepare an EIS for all "major" federal actions significantly affecting the quality of the human environment. 16 U.S.C. §4332(2)(C).

In sum, because the administrative record before the FCC already demonstrates conclusively that communication towers "will or may" cause significant adverse effects to migratory birds, the FCC must conduct a programmatic EIS immediately, not after gathering further background information.

2) THE FCC MUST ADOPT ADDITIONAL CRITERIA FOR MIGRATORY BIRDS TO TRIGGER AN EA FOR INDIVIDUAL TOWER APPLICATIONS.

The NPRM requests "comment on whether to add an additional criterion for requiring an EA to Section 1.1307(a) of our rules." "Finally, we seek comment on whether we should amend Commission rule 1.1307 [47 C.F.R. 1.1307] to include potential impact on migratory birds as a criterion that requires the filing of an Environmental Assessment (EA)."

Almost all towers registered by the FCC are categorically excluded from environmental review by the FCC's NEPA rules. 47 C.F.R. 51.1306. The Council on Environmental Quality's NEPA regulations allow federal agencies to promulgate rules exempting some actions from NEPA analysis. 40 C.F.R. § 1500.4(p). But the FCC has severely abused its discretion by exempting almost all tower registrations. Thus, in a rule promulgated in 1986, the FCC declared that all FCC actions, decisions, licenses, permits, and renewals are "categorically excluded" from NEPA review unless the action falls into a few narrowly defined categories set forth in the regulations. See 47 C.F.R. § 1.1307 et seq.

These categories include the approval of: (1) facilities that are to be located in a designated wilderness area or wildlife preserve; (2) facilities that may affect ESA listed species; (3) facilities that may affect cultural or historic resources that are eligible for listing on the National Register of Historic Places; (4) facilities that are located in a Flood Plain; (5) facilities "whose construction will involve significant change in surface features;" and (6) facilities that are to be equipped with high intensity light in residential areas. 47 C.F.R. § 1.1307(a). Under these FCC regulations, communication tower applicants need only prepare ~~an~~ Environmental Assessment if, and only if, the project falls within one of these narrow categories—and only if the applicant makes that determination. The FCC neither conducts nor has the ability to conduct any independent review of an antenna structure's environmental impacts, whether to migratory birds or otherwise.

By contrast, the Council on Environmental Quality's regulations interpreting NEPA--which are binding on all federal agencies--outline a much larger class of potential environmental impacts which must be evaluated in an EA and, if determined to be "significant," addressed in an Environmental Impact Statement. The CEQ regulations provide that, in determining whether an agency action requires the preparation of an EIS, the agency must consider, among other factors, whether the action involves "[u]nique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands [and] ecologically critical areas," Id. at § 1508.27(b)(3); "[t]he degree to which the effects on the quality of the human environment are likely to be highly controversial," Id. at § 1508.27(b)(4); "[t]he degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks," Id. at § 1508.27(b)(5); "[t]he degree to which the action may establish a precedent for future actions with significant effects or represent a decision in principle about a future consideration," Id. at § 1508.27(b)(6); "the degree to which the action is related to other actions with . . . cumulatively significant impacts," Id. at § 1508.27(b)(7); "[t]he degree to which the action adversely affect an endangered or endangered or threatened species," Id. at § 1508.27(b)(9); and whether "the action threatens a violation of Federal . . . law or requirements imposed for the protection of the environment." Id. at § 1508.27(b)(10).

Under current FCC rules and practice, tower construction projects that will have potentially significant adverse effects on non-endangered birds protected under the Migratory Bird Treaty Act, 16 U.S.C. § 703 et seq., are categorically excluded under the FCC's regulations, and hence require no NEPA review whatsoever. The FCC regulations provide no rationale for this omission, nor can it be reconciled with the CEQ regulations implementing NEPA. In a May 1, 2000 Freedom of Information Act request by the Forest Conservation Council to the FCC, the

Council requested “Copies of all scientific studies, reports, monitoring data, and any other information the FCC relied upon to determine that Commission actions not covered by 47 C.F.R. § 1.1307(a) and (b) are deemed individually and cumulatively to have no significant effect on the quality of the human environment and are categorically excluded from environmental processing.” On August 7, 2000, the FCC responded by providing materials related to the effects of radio frequency radiation on humans. No other issue was researched, examined, or otherwise dealt with in making the categorical exclusion determination, including the killing of migratory birds at antenna structures approved and registered by the FCC.

In short, the FCC’s blanket NEPA “exclusion” of all but a handful of FCC activities based on the dubious premise that “the telecommunications industry [as a whole] does not generally raise environmental concerns,” 51 Fed. Reg. at 14999, as well as the agency’s failure to require NEPA analysis for projects that have significant effects on migratory birds protected under the MBTA, are both arbitrary and capricious and contrary to the plain language and intent of NEPA and the CEQ regulations relating to the promulgation of categorical exclusions. See Heartwood, Inc. v. United States Forest Service, 73 F. Supp. 2d 962 (S.D. Ill. 1999). The FCC could readily ascertain their NEPA compliance ‘duties and their failure to comply with NEPA by consulting with the CEQ, but the FCC has failed to do.

Further, the FCC wrongfully delegates the responsibility to the industry registration applicant in individual antenna structure approval and registration cases to determine whether an environmental analysis is required by NEPA. The industry antenna structure registration applicant then decides whether a particular antenna structure project falls within one of the few narrow exceptions to the FCC’s blanket NEPA categorical exclusion. 47 C.F.R. §1.1308. See, e.g., Holly Berland, FCC Office of General Counsel, *Presentation to the Avian Mortality at Communication Towers Workshop* (Aug. 11, 1999) (explaining that “the FCC does not even have an environmental office” and that “what the FCC does is delegate our environmental responsibilities to our licensees and our applicants” who “kind of check off” whether their own projects have significant environmental effects).

Indeed, an FCC guidance document explaining the NEPA review procedures for the agency’s tower registration program under 47 C.F.R. § 17 candidly explains that: “FCC form 854 (Application for Antenna Structure Registration) contains question 28, which asks whether the licensee’s proposed action may have a significant environmental effect requiring an EA. If the licensee indicates “NO’ to this question, no environmental documentation is required to be filed with the Commission.” FCC, Compliance with Commission’s Rules Implementing the National Environmental Policy Act of 1969, *available at* <http://www.fcc.gov/wtb/siting/npaguid.html>. Even in those few circumstances where an applicant does choose to voluntarily prepare an Environmental Assessment because--in the applicants’ own view--a project may have significant environmental effects, the agency’s regulations give applicants virtually unlimited discretion to determine both the content of the EA and the process by which the EA is prepared. See 47 C.F.R. § 1.1308; see also § 1.1311 listing the issues that must be included in an EA, but omitting several of the factors that the CEQ’s binding NEPA regulations state must be considered in an EA.

The FCC's only role in the EA process is to review the final EA and to issue either a Finding of No Significant Impact ("FONSI") – which in most cases is a one-line, conclusory assertion of "no impact" -- or a determination that an Environmental Impact Statement is necessary. *Id.* at § 1.1308. The FCC does not conduct any independent review of an antenna structure's environmental impacts and absent a third party raising environmental concerns, the FCC rubber stamps the application, whether an EA has been conducted, and even more quickly where no EA is decided upon by the applicant.

In short, the FCC's decision to delegate to permit applicants both the responsibility of determining when NEPA review is required and how NEPA review will take place, violates NEPA and numerous judicial precedents interpreting the CEQ regulations. See, e.g., *Illinois Commerce Commission v. I.C.C.*, 848 F.2d 1246, 1258 (D.C. Cir. 1988) (a federal agency "may not delegate to parties and intervenors its own responsibility to independently investigate and assess the environmental impacts of the proposal before it").

In practice, the agency gives applicants virtually unlimited discretion to determine whether environmental analysis will be undertaken, and if it will, how it will be done. The FCC merely asks the applicant to submit a form containing a checklist of potential environmental impacts. In 99%+ of antenna structure applications, the applicant claims that there will be no environmental impacts. The checklist does not mention tower impacts on migratory birds.

Then, in these cases, the FCC simply rubber-stamps the applicant's form in a one line conclusory review, and the tower is categorically excluded from NEPA review. The turn-around time is normally one or two days from the FCC's receipt of the application, giving citizens no opportunity for comment, despite any ability of the FCC to conduct even a cursory NEPA analysis. Only in less than 1% of all tower applications does the applicant check one of the triggers for an environmental assessment, and then the applicant prepares the EA. The FCC is incapable of detennining the accuracy of the applicant's EA and conducts no independent review of the EA. Unless a third party intervenes and objects within a 30-day period, the tower is automatically approved and registered by the FCC. This process is entirely foreign to the spirit and purpose of NEPA and violates NEPA and the CEQ implementing regulations.

The CEQ regulations allow agencies to establish categorical exclusions only for "actions which do not individually or cumulatively have a significant effect on the human environment." As the data submitted herein and in other repeated submissions, including those from the FWS, document, FCC tower registration decisions have significant effects on the human environment both individually and cumulatively by killing millions of MBTA protected migratory birds, including endangered species and at least 65 species of U.S. FWS listed Birds of Conservation Concern.

Clearly, given the FCC's requirements for compliance with NEPA, ESA, and the MBTA, additional criteria for environmental review are needed. Currently the criteria are too narrow, as they only consider effects on federally ESA-designated threatened or endangered species, and not on any other migratory bird species that may be affected either individually or cumulatively by towers. See 47 C.F.R. § 1.1307. Indeed, the Commission admits that, "under our present rules we

do not routinely require environmental processing with respect to migratory birds.” See NPRM, paragraph 33. This glaring deficiency was acknowledged as far back as 1999. Holly Berland, a staff attorney with the FCC’s Office of General Counsel, noted in her August 1999 presentation at the Avian Mortality at Communication Towers Workshop at Cornell University “our environmental rules today do not require the routine consideration and assessment of towers’ impact on migratory bird populations.” See her entire remarks at: www.towerkill.com/workshop/proceedings/html/pan10.html. The FCC has failed to correct this deficiency for more than 7.5 years, and is now asking once again “should this be corrected”?

The current list of criteria is obviously inadequate to comply with conservation statutes. Under the FCC criteria, regardless of the potential or likelihood of take without a permit of migratory birds at an antenna structure (which is a violation of federal law under the MBTA), and regardless of the significance of such take on migratory birds (either individually or cumulatively with other towers), the FCC’s procedures allow the FCC and antenna structure applicants to escape the requirements of NEPA Environmental Assessments for non-ESA migratory birds. The applicant simply checks a box “no” claiming there are no significant environmental effects. Thus, the FCC antenna structure approval and registration process avoids all considerations of non-ESA listed bird impacts and requires no avoidance or preventative measures. This is despite the clear and concise U.S. FWS Guidelines for avoiding such bird deaths that were published in September 2000, and the availability of other measures by which an applicant could avoid avian mortality without in any way impeding the provision of communication services.

The FCC must require applicants to consider additional effects in their determination whether to conduct an EA, including at a minimum the tower’s individual and cumulative effects on migratory birds. Then, the FCC must further require that the applicant adopt avoidance and other measures, as detailed in Section II above to prevent, or at least minimize, such mortality.

The FCC should include in the additional criterion for its rules under 47 C.F.R. §1.1307 requirements for an evaluation of not only the take and impacts to migratory birds, but whether migratory birds that may be taken at towers are listed on the U.S. Fish and Wildlife Service’s Birds of Conservation Concern List. U.S. Fish and Wildlife Service. Birds of conservation concern 2002. Division of Migratory Bird Management, Arlington, Virginia. 99 pp. The online version is available at: <http://migrtorybirds.fws.gov/reports/bcc2002.pdf>. The list is required to be updated at least every five years.